

- LEGEND**
- NOTE: Units Lb and cR do not appear on this map
- |    |    |    |  |
|----|----|----|--|
| Ap | At | Aa | Alluvium: gravel, sand, and silt; nearly flat or gently irregular surfaces on the bottoms, sides, or mouths of river valleys; local relief commonly less than 5 feet; Ap: floodplain; At: terrace; Aa: delta and estuarine valley fill   |
| Wp | Wl | Wr | Marine (nearshore) deposits: silt, sand, and gravel; nearly flat surfaces; widespread cover of organic terrain has local relief of 2 to 3 feet; includes abandoned beach complexes, spits, and bars with local relief commonly less than 5 feet; Wp: plain; Wl: terrace; Wr: beach ridge |
| Fn | Fr | Ft | Glaciofluvial (outwash) deposits: gravel, sand, and silt; gently to strongly irregular surfaces with local relief up to 50 feet; Fn: knolls and depressions; Fr: eskerine ridges; Ft: terraces   |
| Lp | Lb |    | Lacustrine deposits: clay, silt, and sand; Lp: plain, nearly flat or gently irregular surfaces with widespread cover of organic terrain; Lb: clay blanket over strongly irregular or hilly terrain, organic cover is common over low areas between knolls and hills                      |
| Ih | In | Ir | Ice Contact deposits: sand and gravel; Ih: kame moraines and kame-eskerine complexes, in part gradational into deltas, 50 to 300 feet local relief; In: kames; Ir: eskers  |
| Mp | Mn | Md | Morainic deposits: silty or sandy till; Mp: ground moraine, 5 to 25 feet local relief; Mn: hummocky moraine and strongly irregular ground moraine, generally less than 50 feet local relief; Md: drumlins or drumloids; Mt: escarpments or valley walls commonly 50 to 100 feet high     |
| R  | cR |    | Bedrock: Precambrian, mostly granitic rock, gently irregular to broadly rolling plains and/or areas of knolls and ridges with 15 to 30 feet relief; hilly bedrock terrain with up to 300 feet relief; cR: Paleozoic carbonate rock, mainly flat to gently irregular plains               |

- Geological boundary
- Moraine ridge
- Drumlin or drumloid (ice direction shown, not shown)
- \*Glacial striae (ice direction shown)
- Esker (direction of flow assumed, uncertain)
- Abandoned beach
- Partly buried channel (large, small)
- Abandoned or underfit channel (large, small)
- Escarpment or steep bank
- Minor intersecting lineaments or grooves
- Limit of forebay flooding
- Dam site or cofferdam (completed, proposed)
- Gravel pit

- \*Information taken from published geological maps
- |  |   |
|--|---|
|  | Bog and bog containing fen: peaty material generally 5 to 9 feet thick and several feet or more above local water table, permafrost commonly occurs at a depth of 1 to 4 feet depending on local factors (forest cover, slope aspect, drainage, etc.) |
|  | Fen and fen containing bog: either a nearly continuous organic blanket over water or peaty material at or just below the level of the local water table; permafrost appears to be absent  |

Geology by R.W. Klassen and J.A. Netterville 1971-1974

Geological cartography by W.G. Young, Geological Survey of Canada

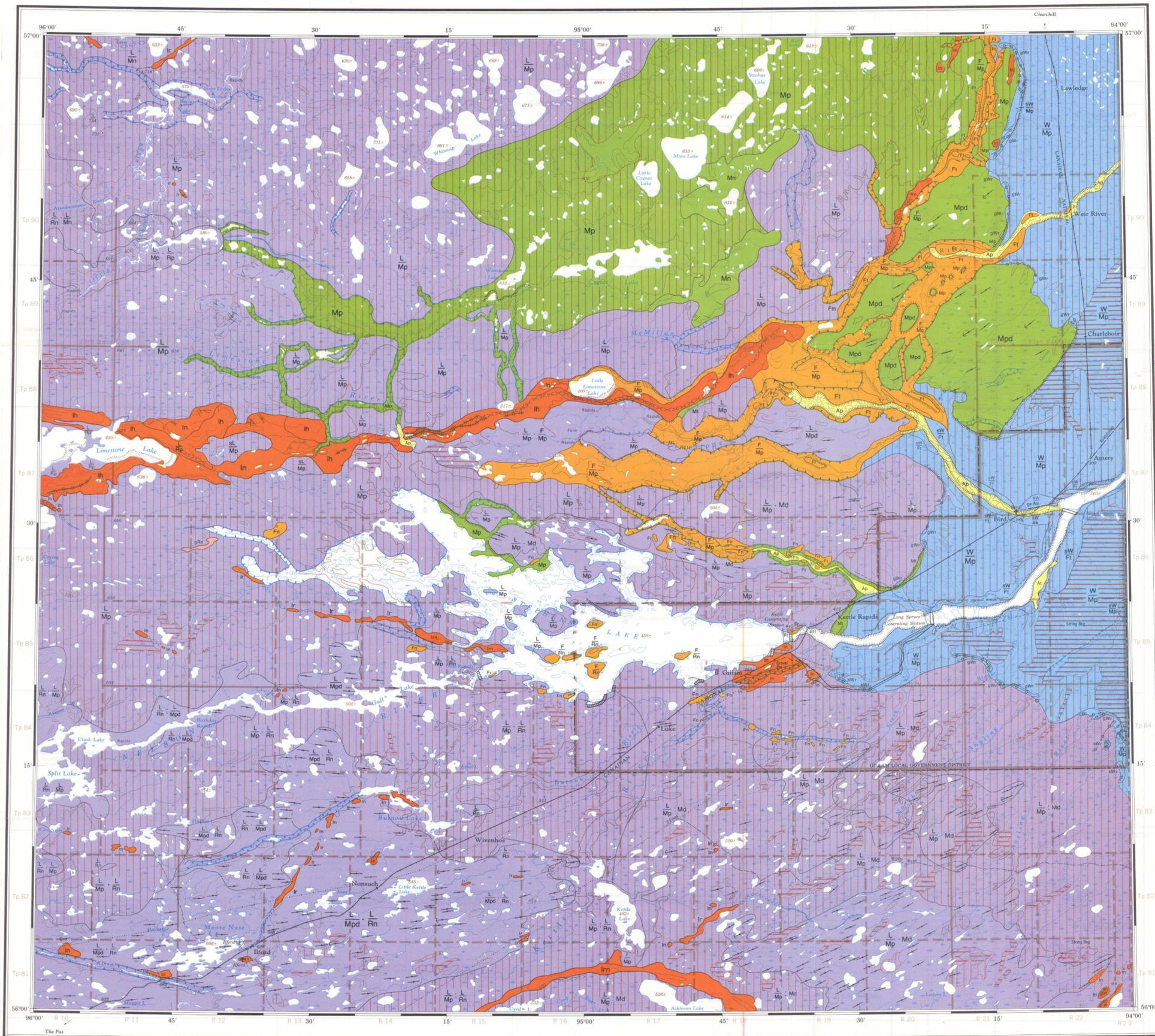
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada.

Base-map at the same scale published by the Surveys and Mapping Branch, 1963

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa

Mean magnetic declination 1979, 5° 69' 7" East decreasing 3.4' annually. Readings vary from 4° 27' 6" in the SE corner to 7° 26' 4" in the NW corner of the map-area

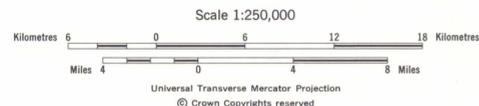
Elevations in feet above mean sea level



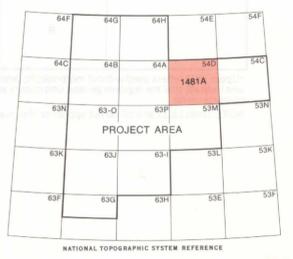
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SURFICIAL GEOLOGY  
**KETTLE RAPIDS**  
EAST OF PRINCIPAL MERIDIAN  
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